

REMARKS

Claims 18, 24, 25, 27, 28, 30, 31 and 33 have been canceled. Thus, claims 1, 5, 6, 12, 15-17, 19-21, 23, 26, 32, 35, 37 and 39 are pending. Independent claims 1, 6 and 15 have been amended and arguments are provided for the patentability of the pending claims. Accordingly, Applicants respectfully request reconsideration of the 35 USC 103(a) rejection of the claims of the present application and respectfully submit that the present application is in condition for allowance.

Claim Rejection Under 35 USC 103(a)

Claims 1, 5, 6, 12, 15-21, 23-28, 30-33, 35, 37 and 39 are rejected under 35 USC 103(a) as being obvious over U.S. Patent No. 5,523,045 issued to Kudert et al. in view of Japanese Patent Application Publication No. JP 03-041135 A of Fukui et al. and in further view of U.K. Patent Application Publication No. 2,295,617 A of Branch.

Applicants respectfully request reconsideration and removal of this rejection for the following reasons.

Each of the independent claims of the present application have been amended to require: (i) the further layer to have a thickness of 10 to 70 microns and consist of HDPE or LMPDE filled with 5% to 15% of a platelet filler; (ii) the platelet filler to consist of a high purity talc filler having an average aspect ratio of 16 to 30 and a minimum aspect ratio of 5; and (iii) a barrier layer having a thickness of 5 to 15 microns. No new matter was added. For example, see the limitations previously recited in claims 25, 28, 31-33 and 35, and see page 5, lines 24-28 with respect to HDPE and LMPDE.

Applicants respectfully submit that the cited references fail to disclose this combination of limitations. For example, Kudert et al. disclose the use of “an oxygen-barrier layer C as thin as 0.001 inch”. This converts to a barrier layer “as thin as” 24.5 microns.

In addition, The U.S. Board of Patent Appeals has consistently held that rejections on obviousness grounds cannot be sustained by mere conclusory statements. Instead, there must be articulate reasoning with rational underpinning to support the legal conclusion of obviousness.

Applicants respectfully submit that a proper *prima facie* case of obviousness cannot be made under 35 USC §103(a) with Kudert et al. in view of Fukui et al. and further in view of Branch because an adequate rationale has not been articulated for making such a combination and/or the needed modifications. The statement that the references generally relate to “containers” is a mere conclusory statement and fails to provide “articulate reasoning with rational underpinning” needed to support the legal conclusion of obviousness. One of ordinary skill in the art using common sense and routine skill and knowledge would not have reasonably modified the teachings of Kudert et al. with those of Fukui et al. and Branch. The technology of Kudert et al. is extremely difficult to control and predict, and Fukui et al. and Branch are directed to containers formed by entirely different technologies relative to that of Kudert et al.. This is explained in greater detail below.

The Kudert et al. patent discloses the production of hot fill blow-molded containers. The containers (see FIGs. 2 and 2A) are produced as follows. First, several different types of molten materials are simultaneously injected (ie., “co-injected”) into a cavity of an injection mold under high pressure (see FIGs. 130-135 and column 7, Table IV) to form a multi-layer intermediate article commonly referred to as a “parison” or “preform” (see FIGs. 1 and 1A). This intermediate

article is permitted to harden and is then removed from the mold and located in blow molding apparatus. Thereafter, the intermediate article is heated and subjected to stretch-blow molding in a blow mold to produce a container such as a hot-fillable bottle.

Co-injection of different types of molten materials in an injection mold under high pressure is **a very sensitive and complicated process**, as demonstrated for instance by FIGs. 11-148 and corresponding description provided by the Kudert et al. patent. The object of Kudert et al. is to form continuous layers through the length of the intermediate article without the layers bleeding through one another or becoming mixed with one another. The gas barrier layer must be continuous, uninterrupted and entirely embedded in the walls of the injection molded intermediate article/blown container if it is to provide its intended purpose. These layers also must remain in tact during the blow molding process when the walls of the intermediate article are stretched, thinned, and radially and longitudinally expanded. The layers also must not delaminate during these processes or when the containers are filled, handled, and used. **Slight changes to the composition of the layers can destroy the desired outcome.**

FIG. 3 of the Kudert et al. patent provides a cross-sectional view of a wall of the blow molded container. The wall includes: innermost and outermost “structural layers” (A, B); an embedded layer (C) of oxygen barrier material; and adhesive layers (D, E) securing the oxygen barrier layer to the structural layers. The **only** disclosure provided by the Kudert et al. patent with respect to talc is on column 30, lines 13-15, which read as follows:

“... The structural layers may contain fillers, such as calcium carbonate or talc, or pigments, such as titanium dioxide.”

Applicants respectfully submit that this is an extremely vague and non-enabling disclosure of talc filler. One of ordinary skill in the art is neither taught the content of talc, the

specific location of the talc layer, nor the type of talc. In addition, considering the complicated and highly sensitive process of co-injecting different molten materials without bleed through or mixing and then blow molding without bleed through or mixing of the different layers, one of skill in the art is not provided with sufficient information by Kudert et al. relative to the use of a talc filler.

In an attempt to overcome the deficiencies of the Kudert et al. patent discussed above, the Fukui et al. and Branch references are cited in the Office Action and are combined with the Kudert et al. patent. Applicants respectfully submit that there is no fair disclosure provided by either of the Fukui et al. or Branch references that would cause one of ordinary skill in the art to think of combining them with the Kudert et al. patent in the manner required by the rejection stated in the Office Action.

The Fukui et al. reference discloses a resin composition that is molded into a single layer container. The resin composition is obtained by mixing: 100 parts by weight of PP powder; 1 to 120 parts by weight of talc; 0.01 to 2.0 parts by weight of a 6-hydroxycholesterol compound; and 0.01 to 0.05 parts by weight of a lubricant and/or antistatic agent. This powder mixture is then molded. Molding of the powders is believed to be accomplished by **simple compression molding techniques**.

Fukui et al. fail to disclose a molten material for being co-injected into an injection mold under high pressure with other different molten materials and fails to disclose the use of the material in a multi-layer container. In addition, Fukui et al. clearly fail to disclose whether or not co-injecting of the powder mixture is possible or if the powder mixture will bleed through or mix with other molten materials being simultaneously co-injected under pressure into an injection

mold. Accordingly, there is no fair teaching by Fukui et al. or Kudert et al. to one of skill in the art that suggests the powder mixture of Fukui et al. (including the content of talc needed and relied upon in the cited claim rejection) could be co-injected under pressure in the sensitive and complicated process required by the Kudert et al. patent. Also, neither reference discloses the precise location of this layer.

The Branch reference discloses a particular type of talc for use in forming a single layer shoulder of a tooth paste tube. Similar to Fukui et al., Branch fails to disclose whether or not its composition could be simultaneously co-injected with other different molten materials under pressure in an injection mold and then subjected to blow molding without bleed through, mixing or delamination with the other layers of a multi-layer blow-molded container. Accordingly, there is no fair teaching by Branch or Kudert et al. to one of skill in the art that suggests the composition for a single layer tooth paste shoulder disclosed by Branch could be co-injected under pressure in the process required by the Kudert et al. patent. Also, neither reference discloses the precise location of this layer.

Accordingly, Applicants respectfully submit that it would not be obvious for one of ordinary skill in the art relying only on routine skill and knowledge to produce the invention required by the claims of the present applications based on the disclosures provided by Kudert et al., Fukui et al., and Branch. These prior art references may generally relate to “containers”; but, they are directed to different technologies for forming the containers. The amount, type and location of talc is not disclosed by Kudert et al. and an enabling disclosure for the use of a talc filler is simply not provided by the Kudert et al. patent. Fukui et al. disclose a powder mixture that is not useful in the co-injection process of the Kudert et al. patent; thus, one of skill in the art

would have no reason to combine the teachings of these references. Finally, there is no fair disclosure in Branch suggesting that its composition could be co-injected as required by the Kudert et al. patent; thus, one of skill in the art would have no reason to combine the teachings of these references. Still further, none of these patents state the precise location of the talc-filled layer as required and clearly stated by each of the independent claims (1, 6 and 15) of the present application.

For these reasons, Applicants respectfully submit that claims 1, 5, 6, 12, 15-17, 19-21, 23, 26, 32, 35, 37 and 39 of the present application are patentable and are not-obviated by Kudert et al. in view of Fukui et al. and further in view of Branch. Applicants respectfully request reconsideration and removal of the rejection.

Conclusion

In view of the above amendments and remarks, Applicants respectfully submit that the 103(a) rejection has been overcome and that the present application is in condition for allowance. Reconsideration and a favorable action on the merits are therefore requested.

Applicants reserve the right to file a divisional and/or continuation application with respect to any subject matter disclosed in the description of the present application, as filed.

Please charge any deficiency or credit any overpayment for entering this Amendment to our deposit account no. 08-3040.

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